MINNESOTA
1981

MOTOR VEHICLE CRASH DATA

A COMPILATION OF STATISTICAL TABLES LISTING FATALITIES, INJURIES, AND PROPERTY DAMAGE RESULTING FROM MOTOR VEHICLE CRASHES AND ROADWAY ACCIDENTS IN MINNESOTA DURING 1981 (WITH HISTORICAL REFERENCES TO ANNUAL CRASH STATISTICS FOR THE PREVIOUS DECADE)

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1981

MOTOR VEHICLE CRASH DATA

Office of Traffic Safety
Department of Public Safety
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INTRODUCTION

The 1981 edition of Minnesota Motor Vehicle Crash Data has been produced by the Office of Traffic Safety, Minnesota Department of Public Safety, in accordance with Minnesota Statutes, Section 169.10. The information presented is derived from accident reports submitted by citizens and law enforcement agencies for motor vehicle crashes involving death, personal injury, or property damage.

During 1981 there were 763 people killed and 43,739 injured in a total of 97,879 crashes throughout the state. The total number of Minnesota driver licenses held in 1981 was 2,771,754. Over three million vehicles traveled 28.6 billion miles on our state's roadways.

The total economic loss resulting from motor vehicle accidents in Minnesota was nearly four hundred million dollars. This figure is calculated from costs estimated for 1980 by the National Safety Council for fatalities, injuries, and damage resulting from fatal, personal injury and property damage crashes.

The total dollar value is determines as follows:

763	Deaths	@	$170,000	= $129,710,000
6,961	Incapacitating Injuries	@	14,700	= 102,326,700
18,138	Non-incapacitating Injuries	@	4,400	= 79,807,200
18,640	Possible Injuries	@	1,100	= 20,504,000
66,969	Accidents	@	980	= 65,629,620
			Total	= 397,977,520

This estimate is based on the calculable costs of wage loss, medical expenses, insurance costs, and property damage.

This report is divided into eleven parts. The first examines the crashes, vehicles, and drivers; the others review pedestrians, motorcycles, holidays, and other selected features of motor vehicle crashes.

PART I

SUMMARY INFORMATION

1981 was a very good year for Minnesota in terms of traffic accidents and injuries. The total accident figure of 97,879 was the fewest Minnesota has experienced since 1968. (Some of the decrease could be due to the change in the reporting threshold from $300 to $500 on August 1, 1981. But a large amount of the difference was evident even in the first half of the year.) Traffic injuries decreased for the third year in a row, reaching the lowest point since 1976. Traffic fatalities continued to decline, and reached the lowest level since 1965. Even more important, the fatality rate per 100 million vehicle miles traveled fell to 2.67, the lowest Minnesota has ever achieved.

TABLE 1.01

CRASH, FATALITY AND INJURY RATES, 1972-1981

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Traffic Crashes	111,180	107,956	102,964	123,206	116,390	119,754	118,833	120,633	103,612	97,879
Traffic Fatalities	1,031	1,024	852	777	809	856	980	881	863	763
Traffic Injuries	42,009	42,772	39,537	41,931	41,580	45,200	50,332	49,604	45,227	43,739
Registered Motor Vehicles (Millions of Vehicles)	2.41	2.51	2.67	2.69	2.92	2.77	2.90	3.00	3.01	3.09
Licensed Drivers (Millions of Drivers)	2.50	2.38	2.44	2.51	2.57	2.63	2.64	2.67	2.71	2.77
Vehicular Miles Traveled (Billions of Miles)	24.9	25.2	24.6	25.6	27.0	28.1	28.8	29.0	28.5	28.6
Fatality Rate Per Hundred Million Vehicle Miles Traveled	4.14	4.07	3.47	3.03	3.00	3.05	3.40	3.04	3.03	2.67
Fatality Rate Per 100,000 Registered Vehicles	42.7	40.5	32.0	28.9	27.7	30.9	33.8	29.3	28.7	24.7
Fatality Rate Per 100,000 Population	26.5	26.3	21.8	19.8	20.4	21.6	24.5	21.7	21.2	16.1
Injury Rate Per Hundred Million Vehicle Miles Traveled	169	170	161	164	154	161	175	171	159	153
Injury Rate Per 100,000 Registered Vehicles	1,743	1,691	1,481	1,559	1,424	1,632	1,737	1,652	1,506	1,413
Injury Rate Per 100,000 Population	1,078	1,098	1,009	1,068	1,049	1,144	1,256	1,222	1,111	921
Crash Rate Per Hundred Million Vehicle Miles Traveled	447	429	419	481	432	426	412	417	364	342
Crash Rate Per 100,000 Registered Vehicles	4,613	4,265	3,862	4,580	3,980	4,323	4,100	4,018	3,446	3,163
Crash Rate Per 100,000 Population	2,858	2,770	2,628	3,143	2,936	3,032	2,965	2,971	2,546	2,060

TABLE 1.02

1981 TRAFFIC TOLL COMPARED WITH 1976-1980 AVERAGE

	1976-1980 Average	1981
Deaths	878	763
Injuries	46,389	43,739
Crashes	115,844	97,879
Registered Motor Vehicles (Millions)	2.92	3.09
Licensed Drivers (Millions)	2.64	2.77
Vehicle Miles Traveled (Billions)	28.3	28.6
Fatality Rate Per 100 Million Vehicle Miles Traveled	3.10	2.67

TABLE 1.03

CRASHES, INJURIES, FATAL CRASHES, FATALITIES BY MONTH

	All Crashes	Injuries	Fatal Crashes	Fatalities
January	8,548	3,341	51	61
February	9,571	3,229	27	28
March	5,947	2,657	33	37
April	7,162	3,256	64	69
May	7,867	4,021	64	77
June	8,516	4,482	68	73
July	7,310	4,038	72	77
August	7,955	4,154	76	82
September	7,339	3,714	47	54
October	8,973	4,039	63	80
November	8,154	3,087	52	58
December	10,537	3,721	55	67
Total	97,879	43,739	672	763

TABLE 1.04

FATAL CRASHES, ALL CRASHES BY DAY OF WEEK

Day	Fatal Crashes	All Crashes
Sunday	107	11,902
Monday	55	12,402
Tuesday	68	12,172
Wednesday	78	13,326
Thursday	79	14,328
Friday	122	16,641
Saturday	163	17,108
Total	672	97,879

FIGURE 1.01

TOTAL CRASHES BY TIME OF DAY

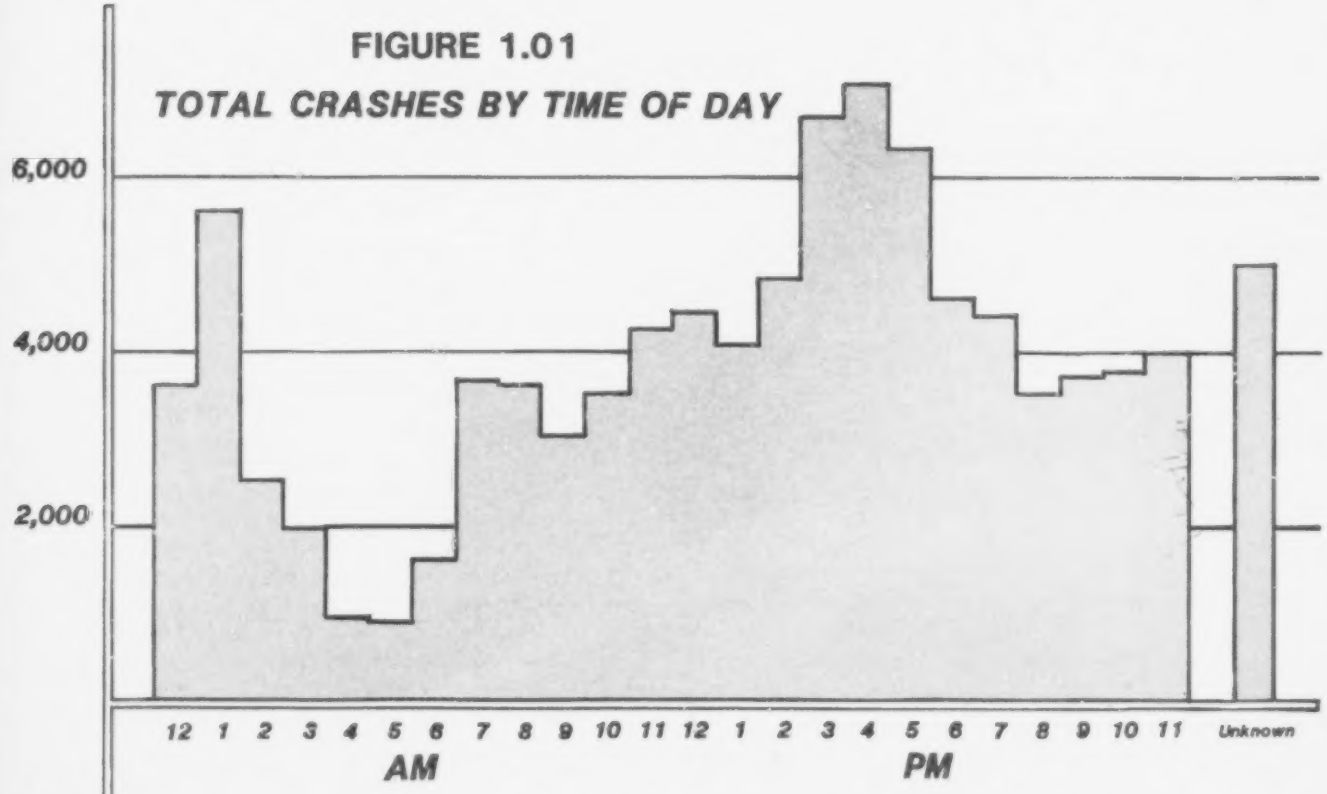


FIGURE 1.02

FATAL CRASHES BY TIME OF DAY

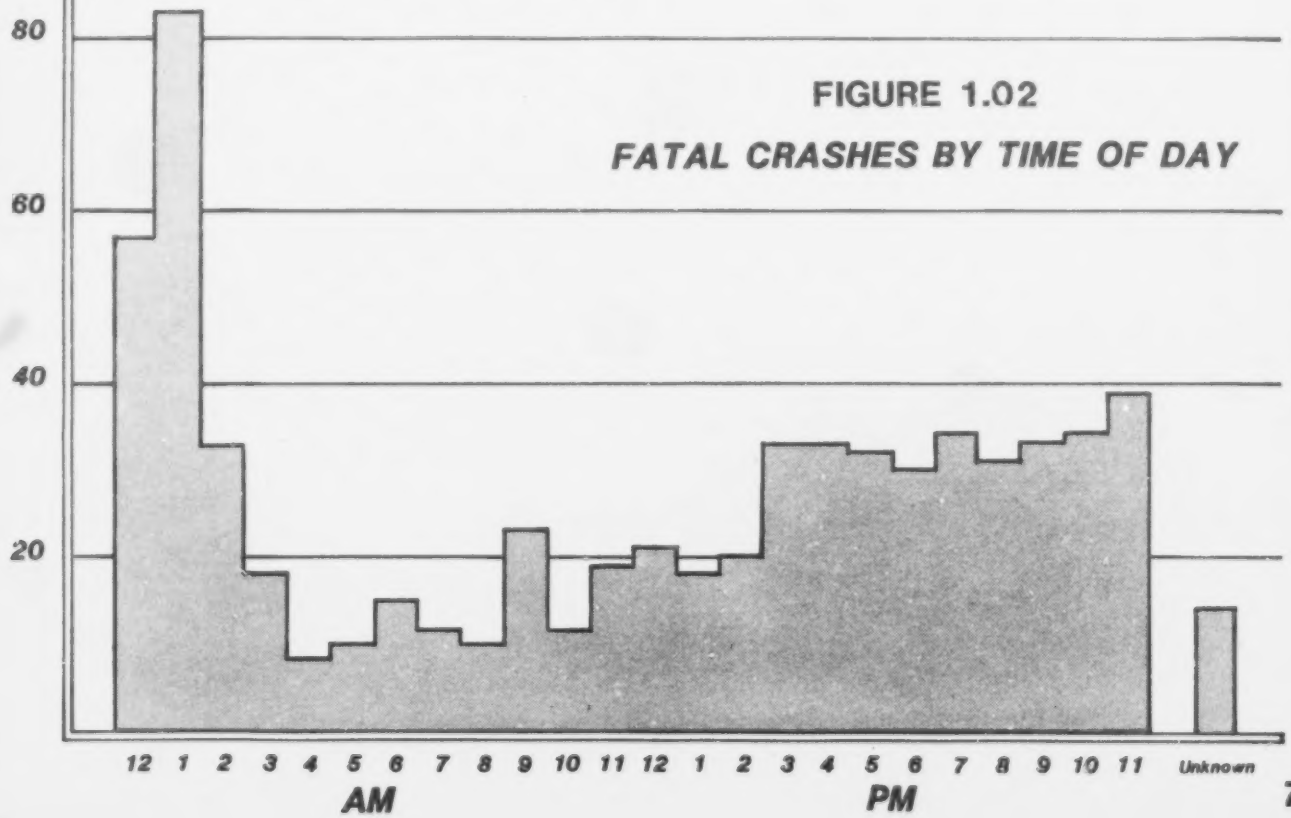


TABLE 1.05

CRASHES, FATAL CRASHES BY TIME OF DAY AND DAY OF WEEK

Hour Beginning	Total Crashes All	Fatal	Monday All	Fatal	Tuesday All	Fatal	Wednesday All	Fatal	Thursday All	Fatal	Friday All	Fatal	Saturday All	Fatal	Sunday All	Fatal
Midnight	3,688	57	356	4	316	4	344	7	426	8	418	6	961	18	867	10
1:00	5,661	83	249	1	361	4	476	10	706	10	701	11	1,657	22	1,511	25
2:00	2,578	33	105	1	186	5	174	1	332	6	248	0	799	14	734	6
3:00	1,487	18	98	2	117	1	76	0	169	1	138	1	426	8	463	5
4:00	950	8	69	0	67	0	77	1	125	0	91	2	253	0	268	5
5:00	889	10	111	0	82	1	89	0	105	1	108	0	202	7	192	1
6:00	1,674	15	337	2	215	0	265	1	270	2	233	4	188	4	166	2
7:00	3,695	12	792	3	617	1	676	3	618	1	635	2	210	1	147	1
8:00	3,604	10	704	1	594	2	652	3	624	1	580	2	305	1	145	0
9:00	3,076	23	526	1	418	4	459	5	442	2	445	3	493	5	293	3
10:00	3,548	12	511	1	470	1	473	2	515	3	537	1	689	3	353	1
11:00	4,276	19	604	1	578	4	632	3	622	2	647	2	781	4	412	3
Noon	4,447	21	569	2	579	1	617	5	653	5	691	3	798	3	540	2
1:00	4,145	18	582	6	558	0	564	1	593	1	600	3	767	3	481	4
2:00	4,872	20	691	4	658	4	747	3	727	2	832	5	759	0	458	2
3:00	6,721	33	963	4	998	3	1,074	5	1,099	5	1,229	3	814	9	544	4
4:00	7,139	33	1,077	6	1,051	8	1,157	2	1,111	1	1,430	6	772	8	541	2
5:00	6,368	32	870	2	943	1	1,036	3	1,010	6	1,203	7	776	6	530	7
6:00	4,667	30	571	3	601	2	620	4	713	3	904	8	752	8	506	2
7:00	4,394	34	470	4	534	4	571	6	650	6	841	4	821	4	507	6
8:00	3,550	31	395	2	415	2	503	4	508	3	712	10	615	7	402	3
9:00	3,755	33	390	0	457	5	485	3	520	3	825	8	676	9	402	5
10:00	3,770	34	367	0	407	5	464	3	535	2	838	16	769	5	390	3
11:00	3,917	39	333	2	373	4	450	3	518	3	984	15	919	10	340	2
Not Stated	5,008	14	662	3	577	2	645	0	737	2	771	0	906	4	710	3
Total	97,879	672	12,402	55	12,172	68	13,326	78	14,328	79	16,641	122	17,108	163	11,902	107

TABLE 1.06

FATALITIES AND INJURIES BY TYPE OF CRASH

Type of Crash	All Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Killed	Injured	Fatality Rate Per 1,000 Crashes
Collision With Other Motor Vehicle	58,623	270	16,993	41,360	329	26,963	5.6
Collision With Motor Vehicle In Other Roadway	203	0	41	162	0	54	0.0
Collision With Parked Motor Vehicle	11,078	12	1,306	9,760	12	1,611	1.1
Collision With Railroad Train	192	13	55	124	15	87	78.1
Collision With Bicyclist	1,255	11	1,206	38	12	1,267	9.6
Collision With Pedestrian	1,648	96	1,547	5	98	1,658	59.5
Collision With Animal	2,710	4	198	2,508	4	251	1.5
Collision With Fixed Object	15,529	148	5,401	9,980	165	7,106	10.6
Collision with Other Object	541	1	162	378	1	209	1.8
Overturn	4,756	100	2,742	1,914	110	3,816	23.1
Fire/Explosion	105	2	13	90	2	16	19.0
Submersion	46	5	16	25	5	23	108.7
Other	1,193	10	558	625	10	678	8.4
Total	97,879	672	30,238	66,969	763	43,739	7.8

TABLE 1.07

CRASHES, KILLED AND INJURED BY COUNTY

FOR 1981 COMPARED WITH 1976-1980 AVERAGE

County	All Crashes		Killed		Injured	
	Average 1976-1980	1981	Average 1976-1980	1981	Average 1976-1980	1981
Aitkin	276	248	8	5	132	139
Anoka	4,608	4,040	28	27	2,254	2,222
Becker	651	512	11	7	318	306
Beltrami	738	554	9	4	280	247
Benton	680	573	11	5	329	282
Big Stone	165	116	2	3	56	40
Blue Earth	1,825	1,568	10	9	604	585
Brown	792	638	6	2	307	313
Carlton	594	478	8	5	251	217
Carver	901	798	12	13	472	433
Cass	400	352	10	2	189	213
Chippewa	337	238	5	12	119	111
Chisago	563	541	8	7	256	259
Clay	1,611	1,077	15	6	495	410
Clearwater	126	84	2	1	59	47
Cook	126	109	1	1	64	45
Cottonwood	272	174	5	2	94	86
Crow Wing	1,221	1,024	18	16	480	459
Dakota	4,947	4,377	38	36	2,242	2,176
Dodge	291	258	4	0	136	150
Douglas	763	639	7	9	313	345
Faribault	376	279	7	2	153	107
Fillmore	400	346	7	7	165	219
Freeborn	960	741	10	9	359	378
Goodhue	1,045	919	12	16	429	428
Grant	112	65	2	1	49	32
Hennepin	33,561	29,475	107	118	13,490	13,090
Houston	382	319	7	6	167	178
Hubbard	288	280	6	2	137	145
Isanti	400	379	5	6	209	242
Itasca	990	700	18	13	465	369
Jackson	301	233	3	4	113	117
Kanabec	212	180	6	3	112	83
Kandiyohi	1,048	928	11	8	341	405
Kittson	185	76	3	0	43	33
Koochiching	428	269	5	3	194	127
Lac Qui Parle	209	159	3	1	76	58
Lake	358	221	5	3	159	129
Lake Of The Woods	76	50	4	0	30	35
Le Sueur	552	502	5	3	230	253
Lincoln	135	115	2	3	51	60
Lyon	571	419	7	4	207	254
Mcleod	681	644	5	4	284	256
Mahnomen	100	73	2	5	44	38

TABLE 1.07 (CONTINUED)

CRASHES, KILLED AND INJURED BY COUNTY

FOR 1981 COMPARED WITH 1976-1980 AVERAGE

County	All Crashes Average 1976-1980	All Crashes 1981	Killed Average 1976-1980	Killed 1981	Injured Average 1976-1980	Injured 1981
Marshall	205	172	7	2	95	106
Martin	433	444	4	5	203	237
Meeker	367	425	5	9	182	173
Mille Lacs	429	375	7	6	202	199
Morrison	676	343	10	12	342	331
Mower	999	777	9	6	370	329
Murray	171	147	4	5	73	60
Nicollet	601	551	5	5	226	221
Nobles	540	404	5	4	197	173
Norman	143	112	4	3	52	44
Olmsted	2,791	2,261	19	5	1,081	937
Otter Tail	1,002	783	12	14	414	363
Pennington	430	273	3	2	163	114
Pine	405	308	9	10	182	143
Pipestone	242	194	4	3	84	70
Polk	932	607	13	10	341	294
Pope	182	182	5	1	68	84
Ramsey	17,835	15,475	54	46	6,012	5,562
Red Lake	97	63	3	3	35	31
Redwood	356	289	4	3	169	118
Renville	383	276	9	3	184	132
Rice	1,153	952	15	10	499	421
Rock	241	197	3	1	69	66
Roseau	191	146	3	6	50	66
St Louis	5,597	3,911	54	44	2,021	1,613
Scott	1,074	1,074	10	9	501	569
Sherburne	603	568	9	9	303	303
Sibley	277	217	4	2	125	108
Stearns	3,172	2,789	29	26	1,265	1,287
Steele	854	549	4	3	301	243
Stevens	228	181	4	0	79	68
Swift	254	190	3	2	90	71
Todd	464	445	8	14	228	217
Traverse	87	67	1	1	33	35
Wabasha	467	436	7	7	204	176
Wadena	291	259	3	2	105	103
Waseca	423	339	5	4	160	156
Washington	2,401	2,189	27	29	1,074	1,114
Watonwan	301	214	3	2	110	85
Wilkin	238	178	3	5	91	75
Winona	1,302	1,178	20	13	458	441
Wright	1,180	1,093	15	19	595	592
Yellow Medicine	236	195	4	5	99	88

TABLE 1.08

COUNTY CRASH REPORT

County	All Crashes	Fatal Crashes	Number Killed	Personal Injury Crashes	Injured	Property Damage Crashes
Aitkin	248	5	5	91	139	152
Anoka	4,040	25	27	1,462	2,222	2,553
Becker	512	7	7	203	306	302
Beltrami	554	4	4	165	247	385
Benton	573	3	5	194	282	376
Big Stone	116	2	3	29	40	85
Blue Earth	1,568	9	9	420	535	1,139
Brown	638	2	2	220	313	416
Carlton	478	5	5	149	217	324
Carver	798	10	13	290	433	498
Cass	352	2	2	140	213	210
Chippewa	238	6	12	70	111	162
Chisago	541	7	7	181	259	353
Clay	1,077	6	6	281	410	790
Clearwater	84	1	1	34	47	49
Cook	109	1	1	31	45	77
Cottonwood	174	1	2	58	86	115
Crow Wing	1,024	15	16	314	459	695
Dakota	4,377	31	36	1,499	2,176	2,847
Dodge	258	0	0	96	150	162
Douglas	639	6	9	223	345	410
Faribault	279	2	2	84	107	193
Fillmore	346	4	7	133	219	209
Freeborn	741	9	9	262	378	470
Goodhue	919	14	16	293	428	612
Grant	65	1	1	23	32	41
Hennepin	29,475	108	118	9,124	13,090	20,243
Houston	319	4	6	122	178	193
Hubbard	280	2	2	101	145	177
Isanti	379	6	6	151	242	222
Itasca	700	9	13	253	369	438
Jackson	233	4	4	74	117	155
Kanabec	180	3	3	50	83	127
Kandiyohi	928	8	8	289	405	631
Kittson	76	0	0	27	33	49
Koochiching	269	3	3	92	127	174
Lac Qui Parle	159	1	1	38	58	120
Lake	221	3	3	80	129	138
Lake Of The Woods	50	0	0	17	35	33
Le Sueur	502	2	3	166	253	334
Lincoln	115	3	3	42	60	70
Lyon	419	3	4	173	254	243
Mcleod	644	4	4	189	256	451
Mahnomen	73	3	5	25	38	45

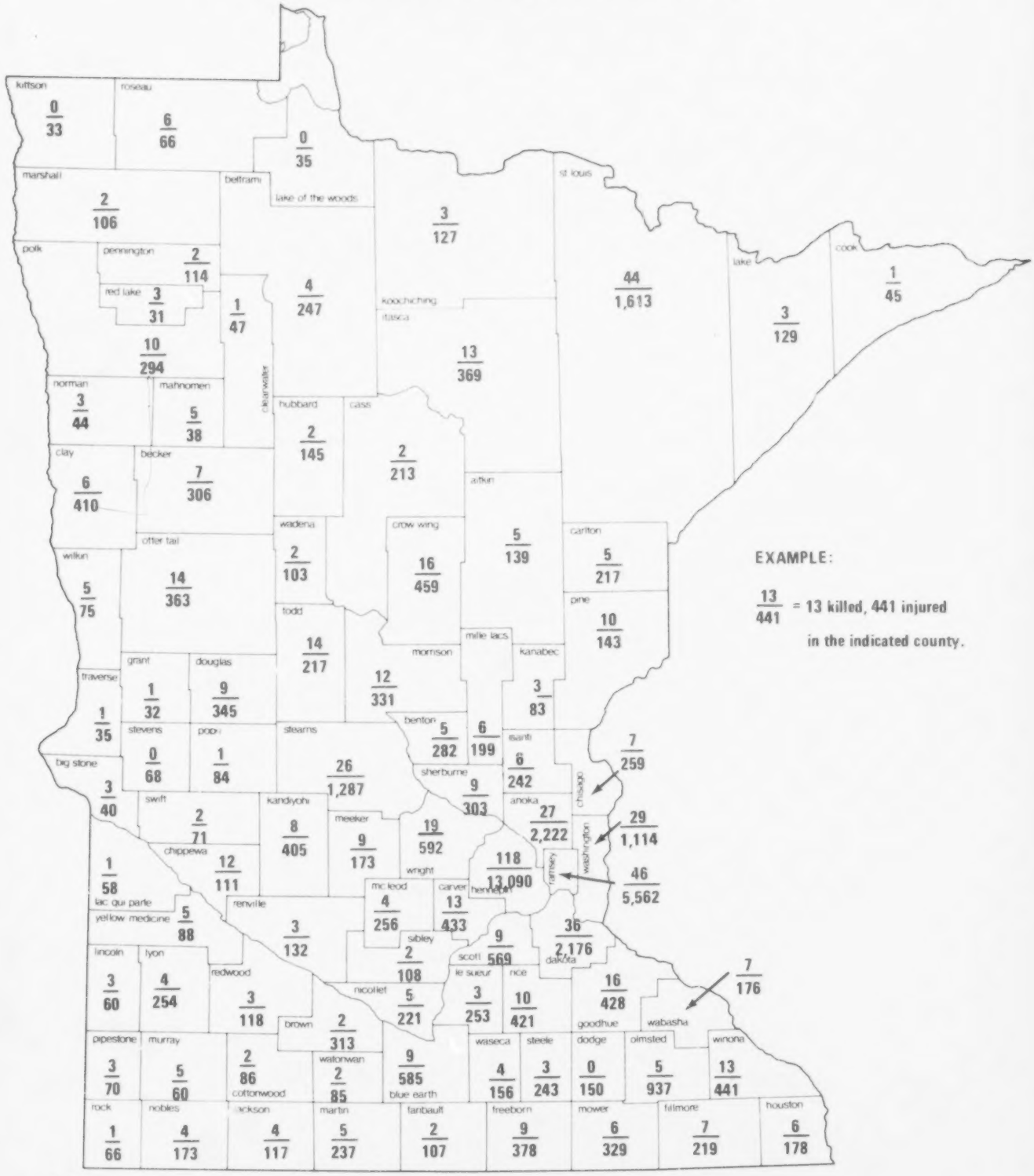
TABLE 1.08 (CONTINUED)

COUNTY CRASH REPORT

County	All Crashes	Fatal Crashes	Number Killed	Personal Injury Crashes	Injured	Property Damage Crashes
Marshall	172	2	2	67	106	103
Martin	444	5	5	159	237	280
Meeker	425	7	9	131	173	287
Mille Lacs	375	6	6	121	199	248
Morrison	623	9	12	214	331	400
Mower	777	6	6	234	329	537
Murray	147	5	5	46	60	96
Nicollet	551	5	5	155	221	391
Nobles	404	3	4	118	173	283
Norman	112	3	3	33	44	76
Olmsted	2,261	4	5	674	937	1,583
Otter Tail	783	12	14	242	363	529
Pennington	273	2	2	83	114	188
Pine	308	10	10	92	143	206
Pipestone	194	3	3	49	70	142
Polk	607	10	10	199	294	398
Pope	182	1	1	58	84	123
Ramsey	15,475	41	46	4,056	5,562	11,378
Red Lake	63	3	3	17	31	43
Redwood	289	3	3	80	118	206
Renville	276	2	3	85	132	189
Rice	952	8	10	281	421	663
Rock	197	1	1	46	66	150
Roseau	146	2	6	36	66	108
St Louis	3,911	39	44	1,102	1,613	2,770
Scott	1,074	9	9	383	569	682
Sherburne	568	9	9	210	303	349
Sibley	217	2	2	72	108	143
Stearns	2,789	25	26	893	1,287	1,871
Steele	549	3	3	166	243	380
Stevens	181	0	0	50	68	131
Swift	190	1	2	51	71	138
Todd	445	10	14	143	217	292
Traverse	67	1	1	24	35	42
Wabasha	436	7	7	119	176	310
Wadena	259	2	2	74	103	184
Waseca	339	4	4	118	156	217
Washington	2,189	24	29	741	1,114	1,424
Watonwan	214	2	2	58	85	154
Wilkin	178	4	5	51	75	123
Winona	1,178	13	13	308	441	857
Wright	1,093	16	19	381	592	696
Yellow Medicine	195	4	5	60	88	131

FIGURE 1.03

COUNTY CRASH REPORT
MINNESOTANS KILLED/INJURED IN 1981



EXAMPLE:

$\frac{13}{441}$ = 13 killed, 441 injured in the indicated county.

TABLE 1.09

LOCATION OF CRASHES BY POPULATION

Population	All Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes
250,000 & Over	26,379	69	7,212	19,098
50,000-249,999	5,738	9	1,660	4,069
25,000- 49,999	15,671	52	4,946	10,673
10,000- 24,999	14,657	68	4,526	10,063
5,000- 9,999	6,708	35	1,990	4,683
2,500- 4,999	5,235	31	1,487	3,717
1,000- 2,499	3,292	30	816	2,446
Under 1,000	20,199	378	7,601	12,220
Total	97,879	672	30,238	66,969

TABLE 1.10

LOCATION OF CRASHES BY URBAN OR RURAL AREA*

	All Crashes		Fatal Crashes		Personal Injury Crashes		Property Damage Crashes	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Urban	69,153	70.7	233	34.7	20,334	67.2	48,586	72.5
Rural	28,726	29.3	439	65.3	9,904	32.8	18,383	27.5

*AN URBAN AREA IS ANY PLACE WITH A POPULATION OF 5,000 OR MORE

TABLE 1.11

CRASHES BY CITY GROUPS

Group	City	All Crashes	Fatal Crashes	Number Killed	Personal Injury Crashes	Number Injured	Property Damage Crashes
A. Population 100,000 Or More	Minneapolis	15,336	48	50	4,478	6,528	10,810
	St. Paul	11,043	21	24	2,734	3,680	8,288
B. Population 20,000-99,999	Apple Valley	322	1	2	116	171	205
	Austin	536	1	1	158	215	377
	Blaine	667	4	5	251	412	412
	Bloomington	2,518	5	5	761	1,052	1,752
	Brooklyn Center	966	5	5	314	434	647
	Brooklyn Park	788	6	9	312	467	470
	Burnsville	875	3	3	291	423	581
	Coon Rapids	703	3	3	260	369	440
	Crystal	414	1	1	156	240	257
	Duluth	1,651	2	2	458	640	1,191
	Eagan	471	4	4	162	229	305
	Edina	866	0	0	305	413	561
	Fridley	787	3	3	272	418	512
	Golden Valley	930	1	1	283	397	646
	Hibbing	473	5	7	122	176	346
	Mankato	1,085	0	0	280	385	805
	Maple Grove	252	2	2	88	120	162
	Maplewood	793	6	6	249	366	538
	Minnetonka	896	4	4	290	432	602
	Moorhead	761	0	0	182	253	579
	New Brighton	313	2	2	100	138	211
	New Hope	307	1	1	94	117	212
	Plymouth	629	3	3	187	279	439
	Richfield	940	2	2	300	417	638
	Rochester	1,569	2	2	441	601	1,126
	Roseville	888	4	4	230	340	888
	St. Cloud	1,658	4	4	484	678	1,170
	St. Louis Park	1,214	2	2	403	527	809
	So. St. Paul	435	1	2	109	145	325
	White Bear Lake	484	1	1	164	237	319
	Winona	741	2	2	180	241	559
C. Population 10,000-19,000	Albert Lea	444	0	0	150	204	294
	Anoka	456	2	2	168	247	286
	Bemidji	316	1	1	83	120	316
	Brainerd	460	1	1	121	165	338

TABLE 1.11 (CONTINUED)

CRASHES BY CITY GROUP

Group	City	All Crashes	Fatal Crashes	Number Killed	Personal Injury Crashes	Number Injured	Property Damage Crashes
C. Population 10,000-19,999	Cloquet	206	2	2	58	84	146
	Columbia Heights	442	0	0	145	218	297
	Cottage Grove	239	2	2	69	101	239
	Eden Prairie	432	9	9	178	282	245
	Fairmont	229	1	1	67	100	161
	Faribault	433	2	4	125	159	306
	Fergus Falls	245	1	1	57	75	187
	Hastings	287	0	0	91	119	196
	Hopkins	466	1	1	152	196	313
	Inver Grove Hgts.	398	6	9	169	263	223
	Lakeville	288	3	3	113	175	172
	Marshall	169	0	0	66	88	103
	Mounds View	211	0	0	73	111	138
	New Ulm	324	0	0	89	129	235
	Northfield	152	1	1	38	56	113
	No. St. Paul	234	0	0	63	80	171
	Oakdale	118	3	3	44	64	71
	Owatonna	334	1	1	90	124	243
	Ramsey	100	1	1	44	70	55
	Red Wing	393	1	1	104	133	288
	Robbinsdale	408	1	1	124	184	283
	Shoreview	283	2	2	83	110	198
	Stillwater	283	2	2	90	118	191
	Virginia	315	2	2	60	79	253
	W. St. Paul	425	1	1	133	186	291
	Willmar	562	0	0	147	201	415
	Woodbury	233	3	4	77	129	153
D. Population 5,000-9,999	Alexandria	318	0	0	93	120	225
	Andover	104	1	1	40	55	63
	Arden Hills	311	3	3	84	125	224
	Champlin	184	2	2	69	95	113
	Chanhassen	177	1	1	76	110	100
	Chaska	187	0	0	54	81	133
	Chisholm	96	0	0	21	27	75
	Crookston	156	0	0	44	56	112
	Detroit Lakes	182	0	0	54	75	128
	East Bethel	71	0	0	26	41	45
	E. Grand Forks	210	4	4	58	89	148

TABLE 1.11 (CONTINUED)

CRASHES BY CITY GROUP

Group	City	All Crashes	Fatal Crashes	Number Killed	Personal Injury Crashes	Number Injured	Property Damage Crashes
D. Population 5,000-9,999	Elk River	146	2	2	51	78	93
	Eveleth	109	1	2	20	26	88
	Falcon Heights	127	0	0	35	42	92
	Grand Rapids	220	0	0	53	74	167
	Ham Lake	136	4	4	50	85	82
	Hutchinson	243	1	1	63	85	179
	Int'l Falls	121	0	0	37	46	84
	Lake Elmo	85	1	2	27	42	57
	Litchfield	125	0	0	37	43	88
	Little Canada	363	0	0	107	140	256
	Little Falls	213	1	1	52	79	160
	Mendota Heights	295	2	2	91	129	202
	Montevideo	106	0	0	27	36	79
	Morris	110	0	0	28	38	82
	Mound	103	1	2	30	40	72
	No. Mankato	140	0	0	30	41	110
	Orono	191	2	2	69	102	120
	Prior Lake	166	2	2	70	124	94
	Redwood Falls	128	0	0	23	29	105
	Rosemount	119	2	2	40	54	77
	St. Anthony	126	0	0	38	51	88
	St. Peter	166	0	0	43	60	123
	Sauk Rapids	96	0	0	33	47	63
	Shakopee	291	1	1	86	117	204
	Spring Lake Park	126	0	0	47	67	79
	Thief River Falls	217	0	0	58	79	159
	Vadnais Heights	183	1	1	64	87	118
	Waseca	153	1	1	29	38	123

TABLE 1.12

CRASHES BY WEATHER CONDITION

Weather Condition	All Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes
Clear	50,985	386	16,575	34,024
Cloudy	24,379	176	8,033	16,170
Rain	9,374	56	2,963	6,355
Snow/Sleet	7,965	29	1,791	6,145
Fog	785	12	306	467
Other	447	5	108	334
Not Stated/ Unknown	3,944	8	462	3,474
Total	97,879	672	30,238	66,969

TABLE 1.13

CRASHES BY LIGHT CONDITION

Light Condition	All Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes
Daylight	52,017	257	16,435	35,325
Dawn/Dusk	6,085	29	1,720	4,336
Darkness	35,224	381	11,575	23,268
Other/ Unknown	4,553	5	508	4,040
Total	97,879	672	30,238	66,969

TABLE 1.14

CRASHES BY ROAD SURFACE CONDITION

Road Surface Condition	All Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes
Dry	59,032	515	20,215	38,302
Wet	16,658	94	5,410	11,154
Snow/Slush	5,200	20	1,249	3,931
Ice/Packed Snow	12,297	31	2,552	9,714
Other	1,035	7	357	671
Not Stated/ Unknown	3,657	5	455	3,197
Total	97,879	672	30,238	66,969

TABLE 1.15

ROAD MILEAGE SUMMARY

Type Of Roadway	Miles Of Roadway	Percent
Interstates	868	.7
Trunk Highways	11,251	8.6
County State Aid Highways	29,936	22.9
County Roads	15,276	11.7
Township Roads	55,229	42.3
Local Streets	15,182	11.6
Other Roads	2,879	2.2
Total	130,621	100.0

TABLE 1.16

CRASHES BY TYPE OF ROADWAY

Type Of Roadway	All Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes
Interstate	5,973	49	1,492	4,432
Trunk Highway	32,660	290	10,954	21,416
County State Aid Highway	20,887	205	7,628	13,054
County Road	2,306	25	906	1,375
Township Road	2,163	33	839	1,291
Local Street	32,394	67	8,156	24,171
Other Road	1,496	3	263	1,230
Total	97,879	672	30,238	66,969

TABLE 1.17

MILEAGE AND CRASH DISTRIBUTION BY TYPE OF ROADWAY

Type of Roadway	Percent of Road Mileage	Percent of Vehicle Mileage	Percent of All Crashes	Percent of Fatal Crashes
Interstates	.7	16.3	6.1	7.3
Trunk Highways	8.6	41.4	33.4	43.2
County State Aid Highways	22.9	20.5	21.3	30.5
County Roads	11.7	2.5	2.4	3.7
Township Roads	42.3	2.5	2.2	4.9
Local Streets	11.6	16.7	33.1	10.0
Other Roads	2.2	.1	1.5	.4

TABLE 1.18

LOCATIONS OF CRASHES AND FATAL CRASHES BY TIME OF DAY

Time of Day	Trunk Highways and County State-Aid Highways		Roadways Other Than Trunk Highways and County State-Aid Highways	
	All Crashes	Fatal Crashes	All Crashes	Fatal Crashes
Midnight - 2:59 AM	7,301	140	4,626	33
3:00 AM - 5:59 AM	2,078	28	1,248	8
6:00 AM - 8:59 AM	5,773	32	3,200	5
9:00 AM - 11:59 AM	6,580	45	4,320	9
Noon - 2:59 PM	8,036	37	5,428	22
3:00 PM - 5:59 PM	12,376	79	7,852	19
6:00 PM - 8:59 PM	7,868	79	4,743	16
9:00 PM - 11:59 PM	7,012	91	4,430	15
Not Stated	2,459	13	2,549	1
Total	59,483	544	38,396	128

TABLE 1.19

AGE AND SEX OF FATALITIES

Age Group	Male	Female	Total
0- 4	7	5	12
5- 9	9	2	11
10-14	17	9	26
15-19	88	55	143
20-24	130	21	151
25-29	83	17	100
30-34	47	9	56
35-39	32	11	43
40-44	12	4	16
45-49	16	9	25
50-54	19	9	28
55-59	18	12	30
60-64	14	8	22
65-69	8	9	17
70-74	10	14	24
75 & Over	20	30	50
Not Stated	5	4	9
Total	535	228	763

TABLE 1.20

AGE AND SEX OF INJURIES

Age Group	Male	Female	Not Stated	Total
0- 4	580	494	3	1,077
5- 9	730	563	5	1,298
10-14	921	773	2	1,696
15-19	4,985	3,759	4	8,748
20-24	5,048	3,291	2	8,341
25-29	3,132	2,179	1	5,312
30-34	1,929	1,551	2	3,482
35-39	1,232	1,118	2	2,352
40-44	824	842	3	1,669
45-49	612	652	0	1,264
50-54	669	630	0	1,299
55-59	543	588	1	1,132
60-64	463	552	0	1,015
65-69	386	412	1	799
70-74	264	367	0	631
75 & Over	370	476	1	847
Not Stated	865	1,086	825	2,776
Total	23,553	19,333	852	43,738

TABLE 1.21

AGE DISTRIBUTION OF LICENSED DRIVERS

AND THEIR INVOLVEMENT IN CRASHES

Age Group	Percent of Licensed Drivers	Percent of Drivers in Fatal Crashes	Percent of Drivers in All Crashes
15-19	9.5	16.4	15.8
20-24	14.0	21.4	17.4
25-29	13.1	15.7	12.0
30-34	11.7	8.9	9.1
35-39	9.1	7.0	6.1
40-44	7.2	4.1	4.4
45-49	6.2	3.3	3.6
50-54	6.1	4.8	3.3
55-59	6.0	3.3	3.1
60-64	5.4	3.2	2.5
65-69	4.5	2.2	1.9
70-74	3.4	1.6	1.4
75 & Over	3.9	3.1	1.8
Not Stated	0.0	4.9	17.8
Total	100.1	99.9	100.2

TABLE 1.22

AGE AND SEX OF DRIVERS IN ALL CRASHES *

Age Group	Male	Female	Not Stated	Total
15-19	19,009	8,563	83	27,655
20-24	20,911	9,472	86	30,469
25-29	14,356	6,618	65	21,039
30-24	10,530	5,275	66	15,871
35-39	6,883	3,712	35	10,630
40-44	5,088	2,554	28	7,670
45-49	4,193	2,030	29	6,252
50-54	3,946	1,835	17	5,798
55-59	3,866	1,638	19	5,523
60-64	2,972	1,330	18	4,320
65-69	2,270	1,002	15	3,287
70-74	1,648	861	9	2,518
75 & Over	2,188	894	15	3,097
Not Stated	7,547	3,030	20,660	31,237
Total	105,407	48,814	21,145	175,366

*Most crashes involve more than one driver. For that reason, the total number of drivers involved in crashes and listed here will be greater than the total number of all crashes (which was 97,879 in 1981).

TABLE 1.23

AGE AND SEX OF DRIVERS IN FATAL CRASHES*

Age Group	Male	Female	Total
15-19	132	36	168
20-24	191	28	219
25-29	139	22	161
30-34	77	14	91
35-39	60	12	72
40-44	35	7	42
45-49	28	6	34
50-54	35	14	49
55-59	30	4	34
60-64	24	9	33
65-59	18	4	22
70-74	12	4	16
75 & Over	24	8	32
Not Stated	43	7	50
Total	848	175	1023

*Most crashes involve more than one driver. For that reason, the total number of drivers involved in fatal crashes and listed here will be greater than the total number of fatal crashes (which was 672 in 1981).

TABLE 1.24

DRIVER LICENSE* SUMMARY BY AGE, 1972-1981

Age	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981		
										Male	Female	Total
15-19	290,750	288,506	290,620	300,906	307,481	315,138	304,021	290,570	281,750	141,083	128,494	269,577
20-24	372,108	347,893	356,806	366,037	373,524	381,161	381,377	385,831	391,310	204,386	191,110	395,496
25-29	322,306	295,193	309,647	326,743	341,678	347,358	343,112	350,879	360,167	190,612	178,624	369,236
30-34	250,325	236,114	243,925	249,022	263,080	278,622	285,395	299,790	317,137	169,453	160,035	329,488
35-39	201,257	191,902	196,270	202,558	209,903	221,252	229,247	235,994	240,789	132,831	124,619	257,450
40-44	193,734	179,544	179,361	178,964	181,150	183,921	186,793	190,213	196,020	105,984	98,333	204,317
45-49	193,940	183,932	181,799	181,586	180,661	178,614	173,818	173,194	172,813	91,360	83,836	175,196
50-54	182,701	173,896	177,473	178,987	178,916	179,266	176,922	174,754	173,760	91,514	81,847	173,361
55-59	166,132	160,738	160,332	161,616	155,747	166,771	165,288	167,712	168,986	90,374	78,746	169,120
60-64	141,294	135,037	138,223	141,978	145,464	146,736	147,428	147,381	148,512	80,930	71,174	152,104
65-69	113,174	106,488	109,932	113,363	115,327	117,955	118,899	121,295	124,469	69,182	59,128	128,310
70-74	84,369	75,788	79,335	82,527	85,428	86,494	87,833	90,064	92,061	52,266	43,119	95,385
75 & Older	102,901	80,248	86,548	95,318	94,665	93,383	96,487	97,741	98,499	65,561	41,296	106,857
Total	2,614,991	2,455,279	2,510,271	2,579,605	2,633,024	2,696,671	2,696,620	2,725,418	2,766,273	1,485,536	1,340,361	2,825,897

*Includes Learner's Permits

TABLE 1.25

APPARENT CONTRIBUTING FACTORS IN CRASHES

Apparent Contributing Factors	All Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes
Failure to Yield Right of Way	14,447	88	5,787	8,572
Illegal/Unsafe Speed	14,606	229	5,946	8,431
Following Too Closely	4,930	3	1,888	3,039
Disregard For Traffic Control Device	3,920	37	2,036	1,847
Driving Left of Roadway Center--Not Passing	2,820	88	1,164	1,568
Improper Passing/ Overtaking	2,112	14	601	1,497
Improper/Unsafe Lane Use	5,474	41	1,420	4,013
Improper Parking/ Starting/Stopping	1,467	8	443	1,016
Improper Turn	3,243	11	883	2,349
Unsafe Backing	1,707	0	140	1,567
No/Improper Signal	365	2	94	269
Impeding Traffic	435	1	185	249
Driver Inattention/ Distraction	25,933	154	10,178	15,601
Driver Inexperience	5,368	27	2,020	3,321
Physical Impairment	8,791	188	4,504	4,099
Vision Obscured	3,488	21	1,338	2,129
Defective Equipment	1,372	4	516	852
Pedestrian Violation/ Error	764	47	695	22
Other	3,320	31	1,325	1,964

TABLE 1.26

VEHICLE MOVEMENT IN MULTI-VEHICLE INTERSECTION CRASHES

Vehicle Movement	All Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes
Entering at Angle	13,846	84	5,452	8,310
Same Direction--Both Going Straight	2,135	4	764	1,367
Sideswipe--Passing	633	0	112	521
Same Direction--One Turning, One Straight	2,012	1	579	1,432
Same Direction--One Stopped	4,367	1	1,840	2,526
Same Direction--All Others	1,601	1	303	1,297
Head On	382	9	196	177
Sideswipe--Meeting	225	1	47	177
Opposite Direction--One Left Turn, One Straight	4,387	17	1,717	2,653
Opposite Direction--All Others	257	4	50	203
Backed Into	187	0	17	170
Not Stated	39	0	9	30
Total	30,071	122	11,086	18,863

TABLE 1.27

VEHICLE MOVEMENT IN MULTI-VEHICLE NON-INTERSECTION CRASHES

Vehicle Movement	All Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes
Head On	956	98	598	260
Same Direction--Both Going Straight	2,867	14	933	1,920
Sideswipe--Passing	2,366	8	599	1,759
One Car Parked	9,333	12	1,268	8,053
One Car Stopped In Traffic	1,720	3	689	1,028
One Car Entering Parked Position	104	0	27	77
One Car Leaving Parked Position	610	0	72	538
One Car Entering Driveway Access	1,613	7	480	1,126
One Car Leaving Driveway Access	1,329	1	278	1,050
Backed Into	375	0	32	343
All Others	880	16	257	607
Not Stated	63	1	12	50
Total	22,216	160	5,245	16,811

TABLE 1.28

MOTOR VEHICLE REGISTRATIONS, 1977-1981

Type of Vehicle	1977	1978	1979	1980	1981
Passenger Cars	1,911,108	1,976,349	2,028,324	2,017,865	2,092,170
Pickup Trucks					410,349
Commercial Station Wagons	6,390	6,225	5,930	5,481	4,408
Farm Trucks	118,303	121,311	123,421	123,261	72,234
Gross Weight Trucks	490,863	534,996	565,855	573,472	216,965
Urban Zone Trucks	5,845	6,615	7,119	7,280	7,111
Commercial Zone Trucks					2
Minnesota Based Prorate Trucks	16,309	20,029	22,486	21,330	21,426
Recreational Vehicles	25,172	30,861	33,640	34,827	35,187
Motorcycles	151,763	151,016	156,552	157,815	166,151
Mopeds		2,385	7,877	12,056	13,955
School Buses	4,232	4,192	4,259	4,123	4,031
Buses	2,445	2,642	2,785	3,026	3,256
Tax Exempt Vehicles	38,863	41,408	43,919	46,169	47,694
Motor Vehicle Subtotal	2,771,293	2,898,029	3,002,167	3,006,705	3,094,939
Trailers	507,525	526,424	540,432	552,558	565,914
Collector's Items	15,662	17,978	20,165	23,092	26,579
Grand Total	3,294,480	3,442,431	3,562,764	3,582,355	3,687,432

TABLE 1.29

TYPES OF VEHICLES IN CRASHES*

Motor Vehicle Type	All Crashes	Fatal Crashes
Passenger Car	130,182	643
Passenger Car & Trailer	95	0
Truck Or Truck Tractor	24,529	190
Truck Tractor and Semi-Trailer	2,653	36
Truck Tractor and Twin Trailer	6	0
Truck With Other Trailer	114	2
Motorcycle	3,143	94
Motorscooter/Motorbike	53	4
Motorized Bike/Moped	112	0
School Bus	692	2
Bus	545	3
Motorhome/Camper	392	6
Snowmobile	67	3
Farm Tractor or Equipment	193	6
Taxicab	281	0
Police Vehicle	389	2
Fire Department Vehicle	39	0
Ambulance	47	0
Military Vehicle	20	0
Road Maintenance Vehicle	144	0
Hit-And-Run Vehicle	10,750	18
Other	920	3
Total	175,366	1,012

*Most crashes involve more than one vehicle. For that reason, the total number of vehicles involved in crashes and listed here is greater than the actual 1981 total number of crashes (which was 97,879) or fatal crashes (which was 672).

PART II

PEDESTRIAN INFORMATION

In 1981, there were 59.5 pedestrian fatalities for every 1,000 pedestrian accidents. The especially high vulnerability of pedestrians to injury and death in motor vehicle accidents is apparent when this fatality rate is compared to the overall motor vehicle fatality rate per 1,000 accidents of 7.8.

For the fourth year, pedestrian fatalities were substantially lower than the 1972-1977 average of 128. Despite this decrease, however, pedestrian fatalities constituted 13.1% of the total fatality toll.

It is primarily the young and the aged who are victims of pedestrian crashes. In 1981, persons under 15 years of age accounted for 15.0% of the fatalities and 32.8% of the injuries, and persons age 65 and older made up 30.0% of the fatalities and 11.6% of the injuries.

TABLE 2.01

PEDESTRIAN CRASHES, INJURIES, FATALITIES, 1972-1981

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Pedestrian Crashes*	1,941	1,940	1,750	1,925	1,723	**	1,731	1,700	1,629	1,648
Pedestrians Injured	1,930	1,940	1,753	1,918	1,726	**	1,723	1,678	1,636	1,658
Pedestrians Killed	132	149	106	121	120	140	115	117	114	100

*A "PEDESTRIAN CRASH" IS A CRASH IN WHICH THE FIRST OBJECT THAT WAS STRUCK BY A MOTOR VEHICLE WAS A PEDESTRIAN.

**PEDESTRIAN INJURY INFORMATION IS NOT AVAILABLE FOR 1977.

TABLE 2.02

PEDESTRIAN CRASHES, INJURIES, FATAL CRASHES, FATALITIES BY MONTH

Month	All Crashes	Injuries	Fatal Crashes	Fatalities
January	168	158	14	15
February	157	154	10	10
March	112	113	3	4
April	103	103	8	8
May	142	144	6	6
June	145	145	9	9
July	128	137	8	9
August	106	110	7	7
September	139	143	7	7
October	168	168	8	8
November	128	128	8	8
December	152	155	8	9
Total	1,648	1,658	96	100

FIGURE 2.01

PEDESTRIAN INJURIES BY TIME OF DAY

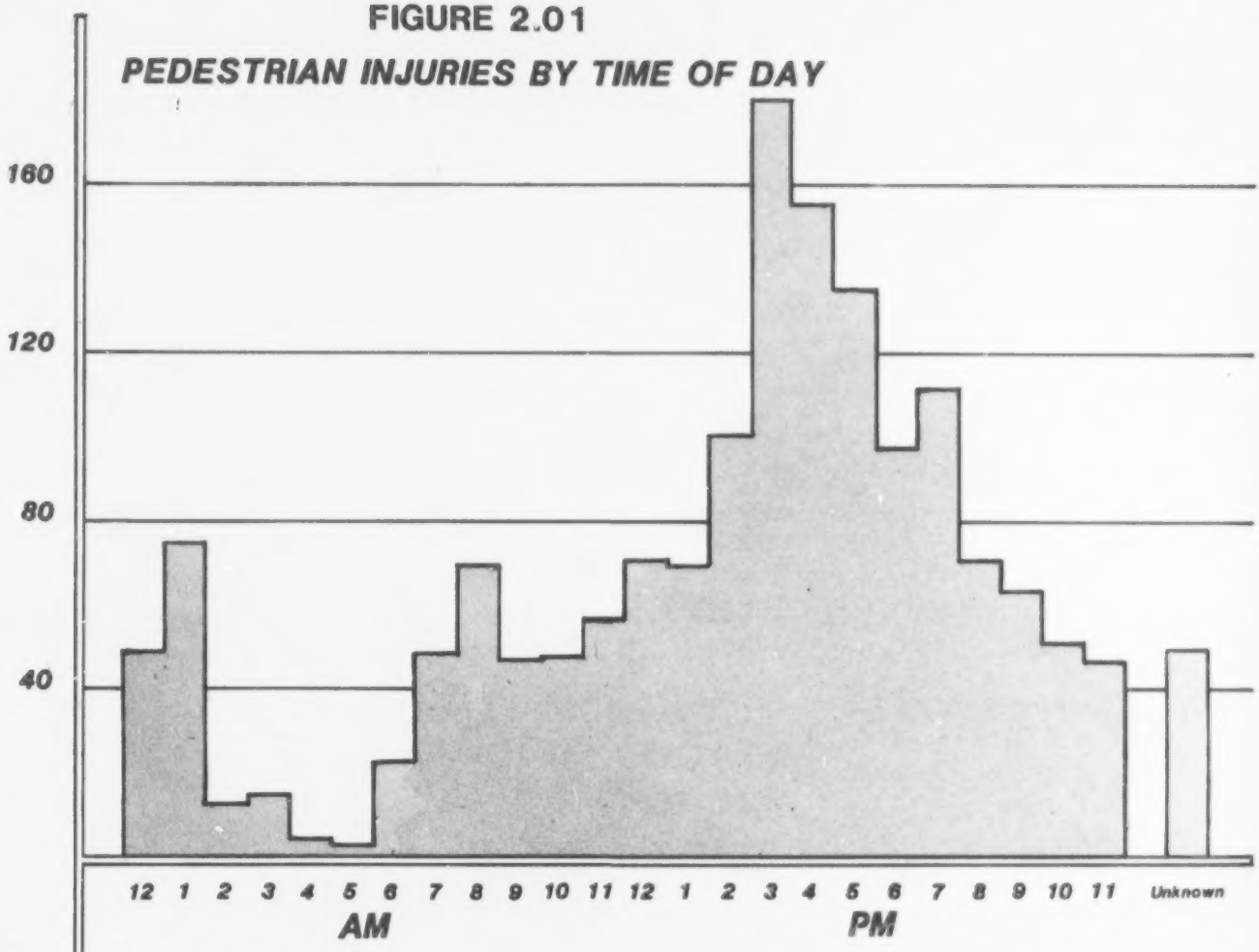


FIGURE 2.02

PEDESTRIAN FATALITIES BY TIME OF DAY

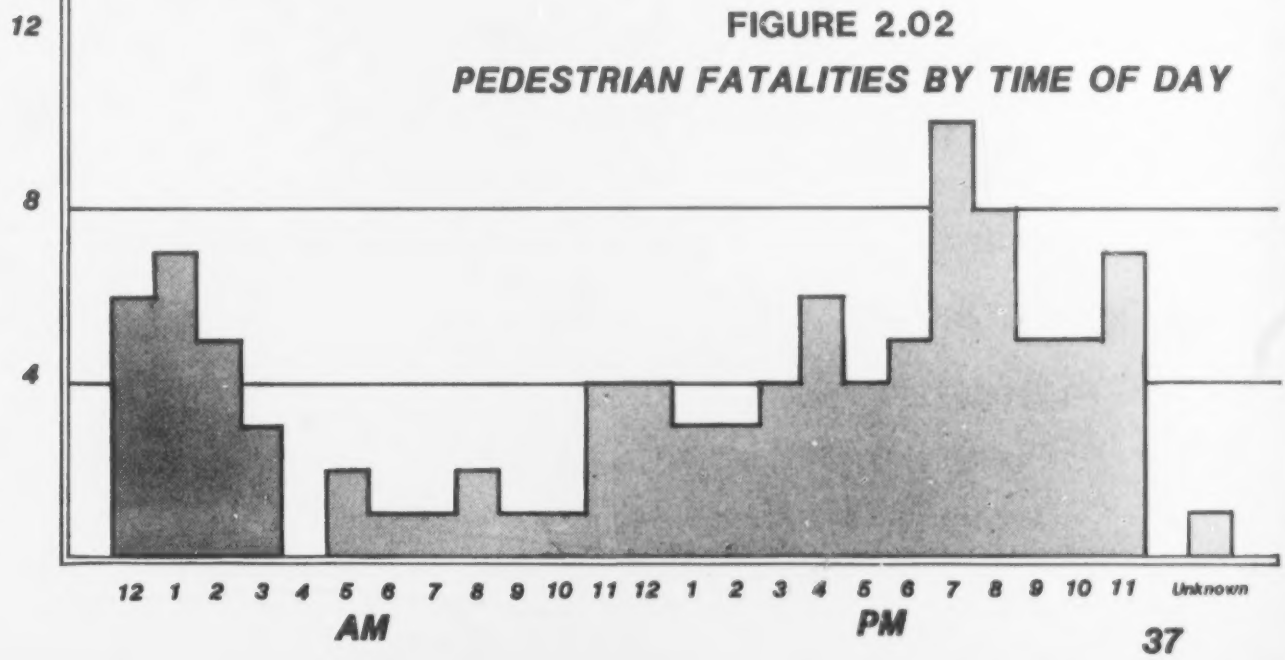


TABLE 2.03

VEHICLE MOVEMENT IN PEDESTRIAN CRASHES

Vehicle Movement	All Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes
Car Going Straight	1,082	73	1,004	5
Car Turning Left	178	3	175	0
Car Turning Right	95	0	95	0
Car Backing	51	0	51	0
All Others	221	17	204	0
Not Stated	21	3	18	0
Total	1,648	96	1,547	5

TABLE 2.04

AGE AND SEX OF PEDESTRIAN FATALITIES

Age Group	Male	Female	Total
0- 4	3	0	3
5- 9	3	1	4
10-14	4	4	8
15-19	7	5	12
20-24	9	0	9
25-34	10	3	13
35-44	5	2	7
45-54	4	1	5
55-64	4	3	7
65-74	6	6	12
75 & Over	3	15	18
Not Stated	1	1	2
Total	59	41	100

TABLE 2.05

AGE AND SEX OF PEDESTRIANS INJURED

Age Group	Male	Female	Total
0- 4	56	44	100
5- 9	161	92	253
10-14	99	92	191
15-19	103	89	192
20-24	105	79	184
25-34	135	93	228
35-44	63	35	98
45-54	41	30	71
55-64	22	46	68
65-74	42	53	95
75 & Over	30	67	97
Not Stated	42	39	81
Total	899	759	1,658

TABLE 2.06

PRIOR ACTION OF PEDESTRIAN FATALITIES AND INJURIES

Action	Number Killed	Number Injured
Crossing With Signal	2	232
Crossing Against Signal	2	105
Crossing In Crosswalk No Signal	8	82
Crossing No Crosswalk No Signal	33	426
Walking In Road With Traffic	6	69
Walking In Road Against Traffic	4	24
Standing In Road	7	85
Emerging From Front/Behind Parked Car	1	113
Child Getting On/Off School Bus	1	12
Getting On/Off Vehicle	0	14
Pushing/Working On Vehicle	2	9
Working In Road	2	11
Playing In Road	1	33
Not In Road	7	27
Other Pedestrian Action	24	201
Unknown	0	215
Total	100	1,658

PART III

BICYCLE INFORMATION

Even though bicycling is increasing in popularity as a means of transportation and recreation, there was a reduction in the number of bicyclists killed and injured as a result of bicycle-motor vehicle collisions during 1981. The injuries received in these crashes continued to be a problem primarily for the young male population in Minnesota. In 1981, 71.3% of the bicyclists killed or injured were male, and of these, 84.1% were under age 25.

TABLE 3.01

BICYCLE-INVOLVED CRASHES, INJURIES, FATALITIES, 1972-1981

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Bicycle Crashes*	1,044	1,301	1,350	1,302	1,217	**	1,154	1,060	1,276	1,255
Bicyclists Injured	949	1,197	1,246	1,202	1,114	**	1,105	993	1,295	1,213
Bicyclists Killed	27	17	16	23	21	24	23	14	19	10

*A "BICYCLE CRASH" IS A CRASH IN WHICH THE FIRST OBJECT THAT WAS STRUCK BY A MOTOR VEHICLE WAS A BICYCLIST.

**BICYCLIST INJURY INFORMATION IS NOT AVAILABLE FOR 1977.

TABLE 3.02

BICYCLE CRASHES, INJURIES, FATAL CRASHES, FATALITIES BY MONTH

Month	All Crashes	Injuries	Fatal Crashes	Fatalities
January	5	5		
February	18	18		
March	57	57		
April	91	88		
May	147	144	1	1
June	232	221	2	2
July	240	238	0	0
August	190	180	2	2
September	155	152	0	0
October	75	70	2	2
November	39	34	3	3
December	6	6		
Total	1,255	1,213	10	10

TABLE 3.03

AGE AND SEX OF BICYCLIST INJURIES

Age Group	Male	Female	Total
0- 4	16	5	21
5- 9	141	41	182
10-14	273	104	377
15-19	201	85	286
20-24	96	55	151
25-34	58	38	96
35 & Over	48	12	60
Unknown	31	9	40
Total	864	349	1,213

TABLE 3.04

AGE AND SEX OF BICYCLIST FATALITIES

Age Group	Male	Female	Total
0- 4	0	1	1
5- 9	2	0	2
10-14	3	1	4
15-19	0	0	0
20-24	1	0	1
25-34	0	0	0
35 & Over	1	0	1
Unknown	1	0	1
Total	8	2	10

TABLE 3.05

PRIOR ACTION OF BICYCLIST FATALITIES AND INJURIES

Action	Number Killed	Number Injured
Riding With Traffic	3	462
Riding Against Traffic	3	102
Making Left Turn	1	72
Making Right Turn	0	22
Making U Turn	0	7
Riding Across Road	2	318
Other	1	230
Total	10	1,213

PART IV

MOTORCYCLE INFORMATION

On April 7, 1977, Minnesota revised its motorcycle helmet law so that only persons who are under age 18 or who are operating a motorcycle with a learner's permit are required to wear a helmet. Since that time, motorcyclist fatalities have increased significantly.

In the five years prior to the change in the helmet law (1972-1976), Minnesota had an average of 58 motorcyclist fatalities each year. Since repeal, however, Minnesota has experienced an average of 103 fatalities each year. Even though the actual number of motorcyclists killed decreased in 1981, the 96 deaths still made up a significant portion of the total traffic fatalities.

TABLE 4.01

MOTORCYCLE-INVOLVED CRASHES BY ACCIDENT TYPE

Accident Type	All Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes
Collision With Other Motor Vehicle	1,638	48	1,292	298
Collision With Motor Vehicle In Other Road-Way	2	0	2	0
Collision With Parked Motor Vehicle	122	2	59	61
Collision With Railroad Train	1	0	0	1
Collision With Bicyclist	35	1	34	0
Collision With Pedestrian	28	1	27	0
Collision With Animal	72	3	64	5
Collision With Fixed Object	319	17	280	22
Collision With Other Object	23	0	22	1
Overturn	666	14	602	50
Fire/Explosion	7	1	2	4
Submersion	1	0	1	0
Other/Unknown	149	5	131	13
Total	3,063	92	2,516	455

TABLE 4.02

MOTORCYCLIST CRASHES, INJURIES, FATAL CRASHES, FATALITIES BY MONTH

Month	All Crashes	Injuries	Fatal Crashes	Fatalities
January	13	11	1	1
February	20	19	0	0
March	96	93	1	1
April	258	252	8	8
May	506	513	11	11
June	536	546	13	13
July	599	619	22	23
August	461	470	19	21
September	360	352	9	9
October	142	134	3	4
November	67	58	5	5
December	5	3	0	0
Total	3,063	3,070	92	96

TABLE 4.03

MOTORCYCLE ACCIDENT SUMMARY, 1972-1981

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Total Motorcycle-Involved Accidents	2,013	2,411	2,400	2,400	2,460	2,718	2,827	2,872	3,308	3,063
Fatal Motorcycle-Involved Accidents	52	63	51	62	61	88	103	95	112	92
Personal Injury Motorcycle Involved Accidents	1,583	1,890	1,865	1,818	1,862	2,120	2,345	2,391	2,728	2,516
Persons Killed In Motorcycle Involved Accidents:	55	65	54	72	62	94	107	98	122	96
Motorcycle Drivers	50	56	43	61	55	85	89	83	107	84
Motorcycle Passengers	4	7	8	2	2	9	17	14	14	12
Pedestrians	1	1	2	1	2	0	0	1	0	0
Bicyclists	0	1	0	0	1	0	1	0	1	0
Others	0	0	1	8	2	0	0	0	0	0
Persons Injured In Motorcycle Accidents:	1,972	2,334	2,245	2,247	2,266	2,564	2,907	2,904	3,393	3,168
Motorcyclists	1,920	2,267	2,184	2,205	2,223	2,522	2,860	2,833	3,359	3,070
Pedestrians	25	31	25	18	28	20	17	42	13	45
Bicyclists	27	36	36	24	15	22	30	29	21	53
Number of Licensed Operators	NA	55,377	91,024	127,081	152,138	172,223	184,545	201,075	222,330	238,926
Number of Registered Motorcycles	103,286	119,227	138,193	136,256	143,237	151,763	151,016	156,552	157,815	166,151
Rates:										
Motorcyclist Injuries Per Motorcyclist Fatality	35.6	36.0	42.8	35.0	39.0	26.8	27.0	29.2	27.8	29.9
Total Injuries Per Fatality (All Vehicles)	40.7	41.8	46.4	54.0	51.3	52.8	51.4	56.3	52.4	57.3
Total Motorcycle Crashes Per Fatal Motorcycle Crash	38.7	38.3	47.1	38.7	40.3	30.9	27.4	30.2	29.5	33.3
Total Crashes Per Fatal Crash (All Vehicles)	128.6	123.0	140.5	181.8	161.7	161.4	140.4	153.3	137.8	145.7
Fatalities Per 10,000 Motorcycle Registrations	5.2	5.3	3.7	4.6	4.0	6.2	7.0	6.2	7.7	5.8
Injuries Per 10,000 Motorcycle Registrations	185.9	190.1	158.0	161.8	155.2	166.2	189.4	181.0	212.8	173.0

Helmet Law May 1, 1968
Eye Protection and Lights On Law August 1, 1975
Helmet Law Repeal April 7, 1977

TABLE 4.04

AGE AND SEX OF MOTORCYCLIST FATALITIES

Age Group	Male	Female	Total
0- 4	0	0	0
5- 9	2	0	2
10-14	2	0	2
15-19	13	3	16
20-24	27	2	29
25-29	24	0	24
30-34	6	0	6
35-39	9	3	12
40-44	0	0	0
45 & Over	2	0	2
Not Stated	3	0	3
Total	88	8	96

TABLE 4.05

AGE AND SEX OF MOTORCYCLIST INJURIES

Age Group	Male	Female	Not Stated	Total
0- 4	10	4	0	14
5- 9	13	8	0	21
10-14	71	20	0	91
15-19	592	115	0	707
20-24	879	118	0	997
25-29	456	62	0	518
30-34	227	25	0	252
35-39	125	23	0	148
40-44	60	15	1	76
45 & Over	109	17	0	126
Not Stated	52	21	47	120
Total	2,594	428	48	3,070

TABLE 4.06

HELMET USAGE OF MOTORCYCLIST FATALITIES AND INJURIES

Helmet Usage	Number Killed	Number Injured
Used	25	782
Not Used	61	958
Unknown	10	1,330
Total	96	3,070

PART V

RAILROAD INFORMATION

For the second year in a row, the number of fatal accidents involving railroad trains and motor vehicles was below the average of the previous five years. Equally important is the fact that railroad crossing accidents in general have decreased by 29%, from 271 in 1980 to 192 in 1981.

TABLE 5.01

RAILROAD CROSSING FATAL CRASHES, FATALITIES, 1972-1981

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Fatal Crashes	31	22	26	19	12	22	25	23	12	13
Fatalities	36	29	29	21	14	26	34	32	15	15

TABLE 5.02

RAILROAD CRASHES, INJURIES, FATAL CRASHES, FATALITIES BY MONTH

Month	All Crashes	Injuries	Fatal Crashes	Fatalities
January	18	10	1	1
February	25	10	0	0
March	14	8	1	1
April	11	3	1	1
May	15	4	0	0
June	13	12	2	2
July	9	5	0	0
August	16	7	4	4
September	6	2	0	0
October	17	6	1	3
November	21	8	1	1
December	27	12	2	2
Total	192	87	13	15

TABLE 5.03

AGE AND SEX OF RAILROAD FATALITIES AND INJURIES

Age Group	Fatalities			Injuries		
	Male	Female	Total	Male	Female	Total
0- 4	0	0	0	1	2	3
5- 9	0	0	0	1	0	1
10-14	0	0	0	4	0	4
15-19	2	5	7	14	6	20
20-24	1	0	1	8	5	13
25-34	0	0	0	10	3	13
35-44	3	0	3	3	3	6
45-54	3	0	3	2	1	3
55-64	0	0	0	3	3	6
65-74	0	0	0	3	1	4
75 & Over	0	1	1	4	0	4
Not Stated	0	0	0	4	6	10
Total	9	6	15	57	30	87

TABLE 5.04

RAILROAD CRASHES AND FATAL CRASHES
BY TIME OF DAY

Time	All Crashes	Fatal Crashes
Midnight-2:59 AM	31	1
3:00 AM-5:59 AM	10	0
6:00 AM-8:59 AM	14	0
9:00 AM-11:59 AM	29	3
Noon-2:59 PM	31	2
3:00 PM-5:59 PM	22	1
6:00 PM-8:59 PM	27	2
9:00 PM-11:59 PM	24	4
Unknown	4	0
Total	192	13

TABLE 5.05

RAILROAD CRASHES BY COUNTY*

County	Number of Crashes
Hennepin	31
Ramsey	23
Clay	10
St. Louis	8
Scott	7
Brown	5
Freeborn	5
Olmsted	5
Wright	5
All Others	93
Total	192

* Counties listed individually are those with 5 or more crashes in 1981.

PART VI

SCHOOL BUS INFORMATION

After an unusually high year in 1979, school bus accidents returned to the "normal" range during 1980 and 1981. The number of school buses involved in injury accidents was the lowest since 1976, and only two vehicles were involved in fatal accidents.

TABLE 6.01

SCHOOL BUSES INVOLVED IN CRASHES, 1972-1981

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
School Buses Involved In Crashes	462	421	539	708	599	724	698	866	678	692
School Buses Involved In Personal Injury Crashes	103	116	148	154	119	162	166	187	171	161
School Buses Involved In Fatal Crashes	3	4	6	2	9	1	2	6	1	2

TABLE 6.02

SCHOOL BUS INVOLVED CRASHES BY ACCIDENT TYPE

Accident Type	All Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes
Collision With Other Motor Vehicle	578	1	128	449
Collision With Motor Vehicle In Other Road-Way	1	0	1	0
Collision With Parked Motor Vehicle	58	0	0	58
Collision With Railroad Train	0	0	0	0
Collision With Bicyclist	1	0	1	0
Collision With Pedestrian	15	1	14	0
Collision With Animal	2	0	0	2
Collision With Fixed Object	14	0	4	10
Collision With Other Object	1	0	0	1
Overturn	6	0	4	2
Other	5	0	3	2
Total	681	2	155	524

PART VII

HOLIDAY INFORMATION

Because of high traffic volumes, the accidents which occur during holiday periods continue to be of special interest. Last year, the holiday period which had the worst profile in comparison to the average was the Fourth of July. During that period 13 people were killed, compared to 7 people who might have been killed during a similar, non-holiday period.

TABLE 7.01

HOLIDAY ACCIDENT SUMMARY, 1974-1981

	Year	Hours	Total Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes	Killed	Injured
Memorial Day	1974	78	702	6	239	457	9	374
	1975	78	871	11	286	574	13	503
	1976	78	875	7	281	587	7	471
	1977	78	854	8	258	588	8	406
	1978	78	1,030	13	343	674	14	616
	1979	78	775	8	307	440	9	469
	1980	78	693	8	316	369	9	465
	1981	78	876	9	298	569	9	470
July 4th	1974	102	1,000	11	311	678	11	474
	1975	78	791	14	246	531	19	441
	1976	78	942	11	293	638	11	505
	1977	78	941	18	274	649	19	453
	1978	30	348	7	154	187	7	258
	1979	30	346	2	148	196	2	233
	1980	78	827	16	339	472	18	548
	1981	78	788	13	328	447	13	502
Labor Day	1974	78	769	15	248	506	17	426
	1975	78	807	9	227	571	9	363
	1976	78	899	9	285	605	10	480
	1977	78	765	7	293	465	10	496
	1978	78	906	9	335	562	11	511
	1979	78	857	10	296	551	11	473
	1980	78	899	11	310	578	12	499
	1981	78	736	7	273	456	10	403
Thanksgiving	1974	102	1,255	9	275	971	10	434
	1975	102	1,931	3	326	1,602	3	513
	1976	102	1,508	9	342	1,157	11	545
	1977	102	2,017	7	370	1,640	7	598
	1978	102	1,746	7	407	1,332	8	653
	1979	102	1,423	9	397	1,017	9	622
	1980	102	2,121	8	486	1,627	10	751
	1981	102	961	7	260	694	7	384
Christmas	1974	30	261	1	48	212	1	72
	1975	30	481	1	86	394	1	130
	1976	78	619	5	136	478	6	232
	1977	78	882	3	212	667	3	373
	1978	78	982	6	225	751	7	371
	1979	30	204	2	46	161	2	70
	1980	30	206	5	46	155	5	82
	1981	78	893	7	211	675	8	323
New Year's	1974	30	391	2	100	289	2	182
	1975	30	506	5	120	381	6	201
	1976	78	932	4	206	722	4	318
	1977	78	1,568	6	312	1,250	6	500
	1978	78	1,196	5	292	899	5	453
	1979	30	609	4	175	417	4	274
	1980	30	698	6	218	474	6	355
	1981	78	1,360	4	298	1,058	5	454

TABLE 7.02

1981 HOLIDAY CRASHES COMPARED WITH NON-HOLIDAY PERIODS

Holiday	Hours	Total Crashes Holiday	Total Crashes Average	Fatal Crashes Holiday	Fatal Crashes Average	Holiday Injury Crashes	Injuries Holiday	Injuries Average	Fatalities Holiday	Fatalities Average
Memorial Day 6:00 PM Friday, May 22 to Midnight Monday, May 25	78	876	897	9	7	298	470	434	9	8
July 4 6:00 PM Thursday, July 2 to Midnight Sunday, July 5	78	788	952	13	7	328	502	467	13	9
Labor Day 6:00 PM Friday, September 4 to Midnight Monday, September 7	78	736	897	7	7	273	403	434	10	8
Thanksgiving 6:00 PM Wednesday, November 25 to Midnight Sunday, November 29	102	961	1,223	7	9	260	384	578	7	12
Christmas 6:00 PM Thursday, December 24 to Midnight Sunday, December 27	78	893	952	7	7	211	323	467	8	9
New Year's 6:00 PM Thursday, December 31, 1981 to Midnight Sunday, January 3, 1982	78	1,360	952	4	7	298	454	467	5	9

The average consists of the average number of accidents occurring in 1981 non-holiday periods of equal length on the same days of the week.

PART VIII

YOUNG DRIVER INFORMATION

Because of their relative inexperience in handling a motor vehicle, the accident experience of young drivers is an area of continuing interest. In 1981, drivers aged 19 or younger constituted 9.5% of the licensed driver population. These same drivers were involved in 15.3% of the accidents and 16.4% of the fatal accidents.

TABLE 8.01

NUMBER AND PERCENT OF LICENSED TEENAGE DRIVERS, 1974-1981

Year	Drivers 15-19	Drivers Over 19	Percent Of Drivers Who Are 15-19
1974	290,620	2,219,757	11.6
1975	300,906	2,251,699	11.9
1976	307,481	2,334,543	11.6
1977	315,138	2,381,533	11.9
1978	304,021	2,392,599	11.3
1979	290,570	2,434,848	10.7
1980	281,750	2,484,282	10.2
1981	269,577	2,556,320	9.5

TABLE 8.02

COMPARISON OF ACCIDENT TYPES OF YOUNG DRIVERS*

Type of Accident	All Accidents Regardless Of Driver Age		Accidents In Which There Was At Least One Young Driver		Accidents In Which Every Driver Was a Young Driver	
	Percent of All Crashes	Percent of Fatal Crashes	Percent of All Crashes	Percent of Fatal Crashes	Percent of All Crashes	Percent of Fatal Crashes
Collision With Other Motor Vehicle	59.9	40.2	66.5	50.0	25.0	15.6
Collision With Motor Vehicle In Other Roadway	.2	.0	.2	.0	.1	.0
Collision With Parked Motor Vehicle	11.3	1.8	7.1	.6	.3	.0
Collision With Railroad Train	.2	1.9	.1	2.5	.4	6.3
Collision With Bicyclist	1.3	1.6	1.3	1.9	.2	.0
Collision With Pedestrian	1.7	14.3	1.3	14.8	.3	1.6
Collision With Animal	2.8	.6	1.4	.0	4.3	.0
Collision With Fixed Object	15.9	22.0	15.4	16.0	48.4	40.6
Collision With Other Object	.6	.0	.4	.0	1.0	.0
Overturn	4.9	14.9	5.3	13.6	16.8	34.4
Fire/Explosion	.1	.3	.1	.0	.2	.0
Submersion	.0	.7	.0	.6	.1	1.6
Other	1.2	1.5	.9	.0	2.8	.0
Total	100.1	99.8	100.0	100.0	99.9	100.1

*Young drivers are defined as persons who are 19 or younger.

TABLE 8.03

COMPARISON OF CONTRIBUTING FACTORS CITED IN CRASHES

BASED ON AGE OF DRIVER INVOLVED

CONTRIBUTING FACTOR	ALL DRIVERS		DRIVERS 19 AND YOUNGER		DRIVERS 20 AND OLDER	
	ALL CRASHES (%)	FATAL CRASHES (%)	ALL CRASHES (%)	FATAL CRASHES (%)	ALL CRASHES (%)	FATAL CRASHES (%)
Failure to Yield Right of Way	13.9	8.9	12.1	7.2	15.2	8.8
Illegal/Unsafe Speed	14.0	23.0	17.2	28.7	12.5	21.8
Following Too Closely	4.7	.3	4.4	.0	5.1	.4
Disregard for Traffic Control Device	3.8	3.7	3.1	5.6	3.9	3.2
Driving Left of Center--Not Passing	2.7	8.9	2.6	11.3	2.5	8.4
Improper Passing/Overtaking	2.0	1.4	1.7	2.1	2.0	1.2
Improper/Unsafe Lane Use	5.3	4.1	4.0	2.1	4.8	4.4
Improper Parking/Starting/Stopping	1.4	.8	1.0	.5	1.4	.9
Improper Turn	3.1	1.1	2.6	1.0	3.1	1.2
Unsafe Backing	1.3	.0	1.2	.0	1.5	.0
No/Improper Signal	.4	.2	.3	.0	.4	.1
Impeding Traffic	.4	.1	.3	.0	.5	.1
Driver Inattention/Distraction	24.9	15.5	23.1	12.3	26.1	16.5
Driver Inexperience	5.1	2.7	12.0	6.2	2.8	1.5
Physical Impairment	8.4	18.9	7.3	13.8	9.6	21.3
Vision Obscured	3.3	2.1	3.0	3.6	3.8	1.7
Defective Equipment	1.3	.4	1.4	.0	1.4	.4
Pedestrian Violation/Error	.7	4.7	.3	2.6	.4	4.7
Other	3.2	3.1	2.6	3.1	3.2	3.1
Total	99.9	99.9	100.2	100.1	100.2	99.7

Percentages are based on all contributing factors cited.

PART IX

HIT-AND-RUN ACCIDENT INFORMATION

Hit-and-run accidents continue to be a problem in Minnesota. In 1981, nearly 12% of the accidents involved a vehicle which left the scene of the accident. Unfortunately, this is especially evident when a pedestrian is also involved; of the 18 fatal hit-and-run accidents, 14 (77.8%) resulted in a pedestrian fatality.

TABLE 9.01

HIT-AND-RUN CRASHES BY ACCIDENT TYPE

Accident Type	All Crashes	Fatal Crashes	Personal Injury Crashes	Property Damage Crashes
Collision With Other Motor Vehicle	3,905	2	776	3,127
Collision With Motor Vehicle In Other Road-Way	12	0	6	6
Collision With Parked Motor Vehicle	5,268	0	113	5,155
Collision With Railroad Train	4	0	0	4
Collision With Bicyclist	141	1	126	14
Collision With Pedestrian	245	14	227	4
Collision With Animal	3	0	0	3
Collision with Fixed Object	1,682	1	101	1,580
Collision With Other Object	27	0	0	27
Overturn	57	0	13	44
Other/Unknown	35	0	5	30
Total	11,379	18	1,367	9,994

PART X

ALCOHOL INFORMATION

Minnesota Statute 169.09, subdivision 11, requires that all drivers who die within four hours of a motor vehicle accident be tested to determine the percentage concentration of alcohol in their blood. In addition, the law requires that all pedestrians 16 years of age or older be tested to determine their blood alcohol concentration if they die within four hours of a traffic accident.

From 1980 to 1981, the percentage of fatally injured drivers who had been drinking prior to the accident dropped from 68.8% to 61.8%. The percentage of these drivers who were at or above the .10 level of intoxication dropped from 57.9% to 52.1%. Even though this appears to be a dramatic decrease, the percentages of drinking and drunken drivers for 1981 were actually the same as the averages for 1976 to 1980.

TABLE 10.01

DRINKING DRIVER FATALITY SUMMARY, 1972-1981

1972	(%)	1973	(%)	1974	(%)	1975	(%)	1976	(%)	1977	(%)	1978	(%)	1979	(%)	1980	(%)	1981	(%)	
1,031		1,024		852		777		809		856		980		881		863		763		People were killed in motor vehicle crashes
567	54.9	561	54.8	501	58.8	431	55.5	478	59.1	476	55.6	576	58.8	523	59.4	519	60.1	437	57.3	Drivers were killed
398	70.2	406	72.4	337	67.3	230	53.4	289	60.5	276	58.0	381	66.1	329	62.9	337	64.9	288	65.9	Fatally injured drivers were tested for alcohol
229	57.5	240	59.1	202	59.9	142	61.7	185	64.0	166	60.1	241	63.3	190	57.8	232	68.8	178	61.8	Of those tested had alcohol in their systems (called positive cases)
177	44.5	206	50.7	171	50.7	114	49.6	154	53.3	148	53.6	196	51.4	147	44.7	195	57.9	150	52.1	Of those tested were at or above the .100 level of intoxication
177	77.3.	206	85.8	171	84.7	114	80.3	154	83.2	148	89.2	196	81.3	147	77.4	195	84.1	150	84.3	Of the positive cases were at or above the .100 level of intoxication
210	91.7	227	94.6	187	92.6	124	87.3	173	93.5	148	89.2	222	92.1	169	88.9	211	90.9	162	91.0	Of the positive cases were male
19	8.3	13	5.4	15	7.4	18	12.7	12	6.5	18	10.8	19	7.9	21	11.1	21	9.1	16	9.0	Of the positive cases were female
56	31.1	85	41.3	68	39.8	41	36.0	56	36.4	48	32.4	78	39.8	57	30.0	68	34.9	61	40.7	Of the positive which tested at .100 or higher occurred between midnight and 3:00 am
100	43.7	105	43.8	93	46.0	81	57.0	90	48.6	84	50.6	113	46.9	104	54.7	121	52.2	83	46.6	Of the positive cases were between the ages of 16 and 24
68	68.0	85	80.9	79	84.9	63	77.8	72	80.0	73	86.9	87	77.0	75	72.1	96	79.3	66	79.5	Of the 16 to 24 year olds testing positive were at or above .100
38	16.6	21	8.8	9	4.5	9	6.3	26	14.1	14	8.4	32	13.3	27	14.2	23	9.9	17	9.6	Of the positive cases were under the legal drinking age

The age of majority was legally lowered to 18 years of age on June 1, 1973.

The legal drinking age was raised to 19 years of age on September 1, 1976.

TABLE 10.02

ACCIDENT TYPES OF FATAL CRASHES COMPARED WITH FATAL CRASHES INVOLVING AN ALCOHOL-POSITIVE DRIVER FATALITY

Type of Accident	Percent of Fatal Crashes	Percent of Fatal Crashes With An Alcohol-Positive Driver Fatality*
Collision With Other Motor Vehicle	40.2	35.4
Collision With Parked Motor Vehicle	1.8	1.7
Collision With Railroad Train	1.9	1.1
Collision With Bicyclist	1.6	0.0
Collision With Pedestrian	14.3	0.0
Collision With Animal	.6	.6
Collision With Fixed Object	22.0	34.3
Overturn	14.9	24.6
Fire/Explosion	.3	0.0
Other	2.4	2.2
Total	100.0	99.9

*These figures are based on the 178 cases in which a fatally injured driver was tested for blood alcohol concentration and was found to have been drinking.

TABLE 10.03

DRIVER FATALITIES' LEVEL OF INTOXICATION BY AGE

Age	Total Killed	Total Tested	Blood Alcohol Concentration						Percent Positive Of Total Tested In Age Group	Intoxicated Of Total Tested In Age Group	Percent Of Total Positive By Age Group
			Total Positive	.010-.049	.050-.099	.100-.149	.150-.249	.250 & Over			
15 And Below	9	2	0						0.0	0.0	0.0
16	8	5	3	1		2			60.0	40.0	1.7
17	17	9	7			3	4		77.8	77.8	3.9
18	20	13	7	1			5	1	53.8	46.2	3.9
19	19	15	10		2	1	7		66.7	53.3	5.6
20	18	11	8	1		3	4		72.7	63.6	4.5
21 - 25	97	69	53	3	9	4	28	9	76.8	59.4	30.1
26 - 30	76	53	41	3	1	10	23	4	77.4	69.8	23.0
31 - 35	30	21	19		2	1	13	3	90.5	81.0	10.7
36 - 40	31	20	9			1	6	2	45.0	45.0	5.1
41 - 45	12	8	2				2		25.0	25.0	1.1
46 - 50	17	11	5	1		1	2	1	45.5	36.4	2.8
51 - 55	15	9	2				1	1	22.2	22.2	1.1
56 - 60	19	11	5	1		2	2		45.5	36.4	2.8
61 - 65	15	10	3	2				1	30.0	10.0	1.7
66 And Above	32	20	4	1		1	2		20.0	15.0	2.2
Unknown	2	1	0						0.0	0.0	0.0
Total	437	288	178	14	14	29	99	22	61.8	52.1	100.2

TABLE 10.04

DRIVER FATALITIES' LEVEL OF INTOXICATION BY MONTH

Time	Total Killed	Total Tested	Total Positive	Blood Alcohol Concentration .010-.049	.050-.099	.100-.149	.150-.249	.250 & Over	Percent Of All Positive
January	29	20	12	1		3	7	1	6.7
February	15	8	6			1	4	1	3.4
March	22	18	15	1	2	2	8	2	8.4
April	41	32	19		1	2	15	1	10.7
May	42	32	25	4	2	3	14	2	14.0
June	45	25	17	3		3	7	4	9.6
July	48	26	14	2	1	4	6	1	7.9
August	54	32	18		1	1	11	5	10.1
September	31	22	12	1	4	3	4		6.7
October	42	32	20	2	1	2	13	2	11.2
November	29	15	9			2	7		5.1
December	39	26	11		2	3	3	3	6.2
Total	437	288	178	14	14	29	99	22	100.0

TABLE 10.05

DRIVER FATALITIES' LEVEL OF INTOXICATION BY ROAD TYPE

Road Type	Total Killed	Total Tested	Total Positive	Blood Alcohol Concentration .010-.049	.050-.099	.100-.149	.150-.249	.250 & Over	Percent Of All Positive
Interstate	33	27	16		1	1	12	2	9.0
Trunk Highway	201	127	73	6	4	12	40	11	41.0
County Road	154	108	72	7	9	14	37	5	40.4
City Street	27	16	10	1		1	6	2	5.6
Township Road	20	10	7			1	4	2	3.9
Other Road	2	0							
Total	437	288	178	14	14	29	99	22	99.9

TABLE 10.06

DRIVER FATALITIES' LEVEL OF INTOXICATION BY TIME OF DAY

Time	Total Killed	Total Tested	Total Positive	Blood Alcohol Concentration .010-.049	.050-.099	.100-.149	.150-.249	.250 & Over	Percent Of All Positive
Midnight-2:59 AM	114	80	72	4	7	12	37	12	40.4
3:00 AM-5:59 AM	26	18	16		1	4	10	1	9.0
6:00 AM-8:59 AM	26	15	6	1			5		3.4
9:00 AM-11:59 AM	43	26	4	2			2		2.2
Noon-2:59 PM	36	23	5			1	2	2	2.8
3:00 PM-5:59 PM	65	44	15	3			10	2	8.4
6:00 PM-8:59 PM	53	32	21		2	4	13	2	11.8
9:00 PM-11:59 PM	66	46	35	3	4	7	18	3	19.7
Unknown	8	4	4	1		1	2		2.2
Total	437	288	178	14	14	29	99	22	99.9

TABLE 10.07

DRINKING PEDESTRIAN FATALITY SUMMARY, 1972-1981

1972	(%)	1973	(%)	1974	(%)	1975	(%)	1976	(%)	1977	(%)	1978	(%)	1979	(%)	1980	(%)	1981	(%)	
132		149		105		121		120		140		115		117		114		100		Pedestrians Were Killed In Motor Vehicle Crashes
67	50.8	73	49.0	46	43.8	45	37.2	58	48.3	62	44.3	54	47.0	56	47.9	48	42.1	53	53.0	Fatally Injured Pedestrians Were Tested For Alcohol
31	46.3	30	41.1	28	60.9	26	57.8	25	43.1	32	51.6	33	61.1	29	51.8	28	58.3	26	26.0	Of Those Tested Had Alcohol In Their Systems (Called Positive Cases)
26	38.8	23	31.5	25	54.3	22	48.9	22	37.9	32	51.6	22	40.7	26	46.4	26	54.2	23	23.0	Of Those Tested Were At Or Above The .100 Level Of Intoxication
26	93.9	23	76.7	25	89.3	22	84.6	22	88.0	32	100.0	22	66.7	26	89.7	26	92.9	23	88.5	Of The Positive Cases Were At Or Above The .100 Level Of Intoxication
4	12.9	4	13.3	5	17.9	2	7.7	4	16.0	6	18.8	3	9.1	4	13.8	2	7.1	1	3.8	Of The Positive Cases Were 66 Or Older
9	29.0	3	10.0	3	10.7	1	3.8	7	28.0	15	46.9	3	9.1	5	17.2	2	7.1	3	11.5	Of The Positive Cases Were Under The Legal Drinking Age

The age of majority was legally lowered to 18 years of age on June 1, 1973.

The legal drinking age was raised to 19 years of age on September 1, 1976.

Only pedestrians 16 years of age or [illegible] are required to be tested for alcohol. Thus, although the percentages given reflect the total number of pedestrians killed, those under age 16 would not have been tested in any case.

TABLE 10.08

PEDESTRIAN FATALITIES' LEVEL OF INTOXICATION BY AGE

Age	Total Killed	Total Tested	Total Positive	Blood Alcohol Concentration .010-.049	.050-.099	.100-.149	.150-.249	.250 & Over	Percent Positive Of Total Tested In Age Group	Percent Intoxicated Of Total Tested In Age Group	Percent Of Total Positive By Age Group
15 & Below	16	4	0						0.0	0.0	0.0
16	0	0	0						0.0	0.0	0.0
17	3	2	1			1			50.0	50.0	3.8
18	5	3	2	1			1		66.7	33.3	7.7
19	4	4	1			1			25.0	25.0	3.8
20	1	1	0						0.0	0.0	0.0
21 - 25	9	6	5			1	4		83.3	83.3	19.2
26 - 30	10	6	4	1	1		1	1	66.7	33.3	15.4
31 - 35	3	2	2				1	1	100.0	100.0	7.7
36 - 40	2	0	0						0.0	0.0	0.0
41 - 45	5	5	4				2	2	80.0	80.0	15.4
46 - 50	4	3	2					2	66.7	66.7	7.7
51 - 55	1	1	1				1		100.0	100.0	3.8
56 - 60	5	2	1				1		50.0	50.0	3.8
61 - 65	4	3	2				1	1	66.7	66.7	7.7
66 & Above	28	11	1			1			9.1	9.1	3.8
Total	100	53	26	2	1	4	12	7	49.1	43.4	99.8

TABLE 10.09

PEDESTRIAN FATALITIES' LEVEL OF INTOXICATION BY MONTH

Month	Total Killed	Total Tested	Total Positive	Blood Alcohol Concentration .010-.049	.050-.099	.100-.149	.150-.249	.250 & Over	Percent Of All Positive
January	15	6	3				2	1	11.5
February	10	6	3				2	1	11.5
March	4	2	2				1	1	7.7
April	8	3	1					1	3.8
May	6	4	2			1	1		7.7
June	9	4	3				2	1	11.5
July	9	4			1		1	1	11.5
August	7	5	3	1			2		11.5
September	7	3	1			1			3.8
October	8	4	0						0.0
November	8	7	5	1		2	1	1	19.2
December	9	5	0						0.0
Total	100	53	26	2	1	4	12	7	99.7

TABLE 10.10

PEDESTRIAN FATALITIES' LEVEL OF INTOXICATION BY ROAD TYPE

Road Type	Total Killed	Total Tested	Total Positive	Blood Alcohol Concentration .010-.049	.050-.099	.100-.149	.150-.249	.250 & Over	Percent Of All Positive
Interstate	6	6	4				3	1	15.4
Trunk Highway	36	24	12	1		2	7	2	46.2
County Road	30	14	8	1		1	2	4	30.8
City Street	25	9	2		1	1			7.7
Township Road	2	0							0.0
Other Road	1	0							0.0
Total	100	53	26	2	1	4	12	7	100.1

TABLE 10.11

PEDESTRIAN FATALITIES' LEVEL OF INTOXICATION BY TIME OF DAY

Time	Total Killed	Total Tested	Total Positive	Blood Alcohol Concentration .010-.049	.050-.099	.100-.149	.150-.249	.250 & Over	Percent Of All Positive
Midnight-2:59 AM	17	11	10			3	4	3	38.5
3:00 AM-5:59 AM	6	4	2				1	1	7.7
6:00 AM-8:59 AM	5	3	1				1		3.8
9:00 AM-11:59 AM	6	2	0						0.0
Noon-2:59 PM	11	3	0						0.0
3:00 PM-5:59 PM	14	7	1					1	3.8
6:00 PM-8:59 PM	21	10	5		1		4		19.2
9:00 PM-11:59 PM	19	12	6	2		1	1	2	23.1
Unknown	1	1	1				1		3.8
Total	100	53	26	2	1	4	12	7	99.9

PART XI

SEAT BELT INFORMATION

The latest government observation study of safety belt use indicated that, nationwide, only 11.5% of the motoring public use their safety belts when they drive. The same study indicated that 16.7% of the drivers in the Minneapolis/St. Paul area used their safety belts. In Minnesota motor vehicle accidents last year, where information on seat belt installation and usage was known, 92.2% of the people killed and 88.2% of the people injured were not wearing safety belts at the time of their accident.

TABLE 11.01

SEAT BELT USAGE OF FATALITIES AND INJURIES
CARS ONLY*

	Fatalities	Injuries
Restraining Device Installed And Used	12	1,370
Restraining Device Installed But Not Used	261	12,982
Restraining Device Not Installed	10	360
Total	283	14,712

*Based on cases for which seat belt installation and usage are known.

TABLE 11.02

INJURY SEVERITY OF CHILDREN INJURED WHILE IN
CHILD RESTRAINT SYSTEMS

Severity of Injury	Children Injured
"K"--Fatal Injury	1
"A"--Incapacitating Injury	4
"B"--Non-Incapacitating Injury	24
"C"--Possible Injury	40
Total	69